

Presentation of Technical Panel on Assumptions and Methods Report

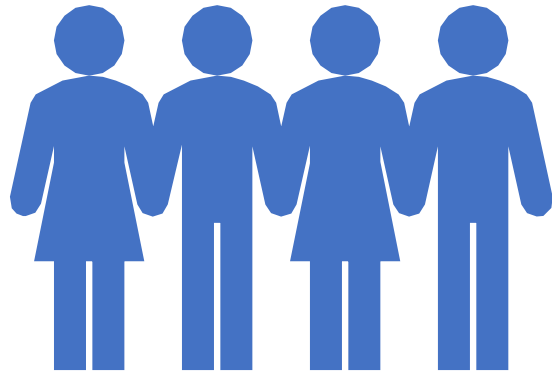
September 27, 2019



A Panel Commissioned by the
Social Security Advisory Board



Panel Members



- Robert Beuerlein
- Ron Gebhardtsbauer
- Alexander Gelber
- Joshua Goldstein
- Patricia Guinn
- Kathleen Mullen
- Louise Sheiner
- Sita Slavov
- Kent Smetters
- Tom Terry

Charter

The panel of expert actuaries, economists and demographers appointed by the Social Security Advisory Board (the board) is charged with providing technical assistance to the board by reviewing the assumptions and the methods used to integrate those assumptions for projecting the future financial status of the Old Age, Survivors, and Disability Insurance (OASDI) programs. The panel shall deliver a written report to the board by September 2019. The report should reflect the full range of views expressed by panel members.

Specifically, the Panel is asked to:

- Review the key economic and demographic assumptions, assess whether they are reasonable, and detail the rationale for considering alternative values.
- Review the current projection methods, assess whether they are reasonable and appropriate, and detail the rationale for considering new methodologies.
- Consult with the board, the Trustees, and the Office of the Chief Actuary regarding specific assumptions or methods that may benefit from additional attention from the panel.
- Review ways to improve the presentation of key concepts in the Trustees report so as to make them more accessible and informative to policymakers and the public.

Process

November 2018 – June 2019 – Monthly Meetings

Input and Presentations:

- Trustees' Working Group
- Past Public Trustees
- Senate Finance Committee
- House Ways and Means Committee
- Congressional Budget Office
- Insurance industry, communications, journalism and academic experts
- Office of the Chief Actuary

Support from SSAB staff

Overview

Charter allowed for review and discussion of all aspects of Trustees Report.

Trustees Report and Projections by OCACT

- Reasonable
- Insightful
- Meaningful

Recommendations - Position Trustees Report for the future

Public Confidence is enhanced by this process.

Specific Recommendations

- Modernizing
- Improving Public Understanding
- Demographic, Economic, Program-Specific Assumptions
- Uncertainty

Modernizing

Enhance current framework.

Flexibility and speed for continuation of good work in future.

Evolution of modeling tools is growing rapidly.

More than incremental.

Multi-year project

- Nimble and robust
- Investment with long-term returns

Improving Public Understanding

Importance of effective communications

Communication has evolved

Trustees Report is well established

Appetite for more information

Recommendations:

- Broadly Accessible
- Transparent
- Highly technical report becomes readable and understandable

Assumptions

Diverse group of experts – Actuaries, Demographers, Economists

Professional judgment is essential

Choice of assumptions can reasonably vary among professionals

Recognize Trustees and OCACT's willingness:

- Detailed scrutiny from our group
- Consideration of recommendations

Recommendations:

- Specific and general
- Equally important – various points of view considered and rationale

Uncertainty

“Increased uncertainty of important assumptions”...External Experts

Recent experience

- Trend
- Aberration
- New Normal

Understanding of uncertainty

- Possible range of outcomes
- Meaningful information for decision making

Recommendations:

- Greater emphasis on uncertainty
- Incorporate state-of-the-art techniques

Methods

Modernization

“Model refresh”

Newer modeling techniques

Modeling dynamic effects on the economy

Uncertainty and Clarity

Recent statistical methods

Communicate statistical
ranges – e.g., 5% and 95%

“Current law” projections

Presentation

Emphasis on
clarity and
understanding

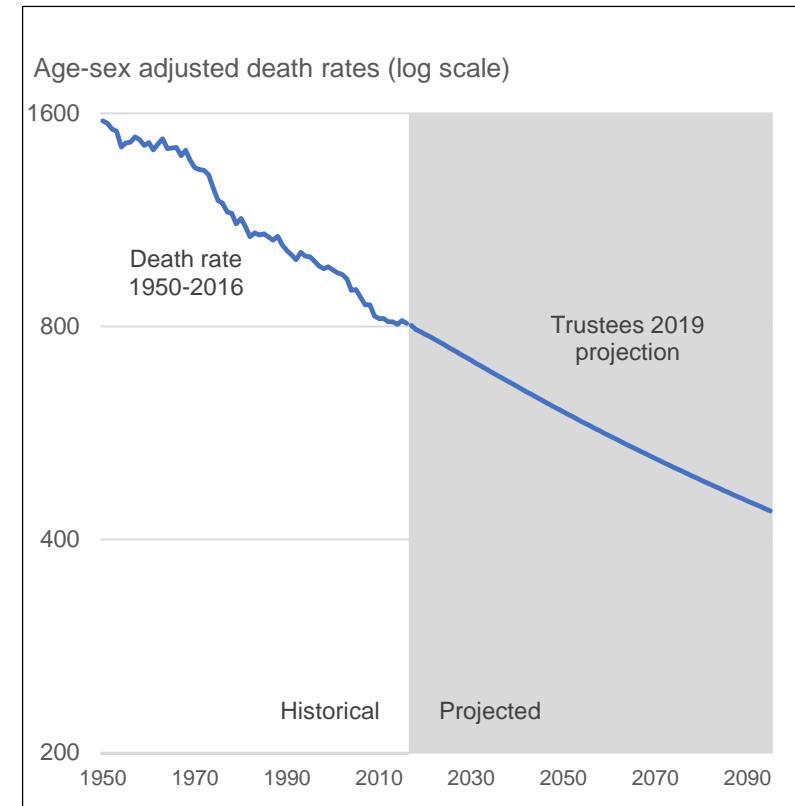
Speak to both sophisticated *and* general audiences

- Understanding of *both* audiences is important
- Enhance public trust
- Highly technical language not helpful (e.g. “trust fund reserve depletion”)

Recommendations aimed at improving **accessibility** and **transparency** of report

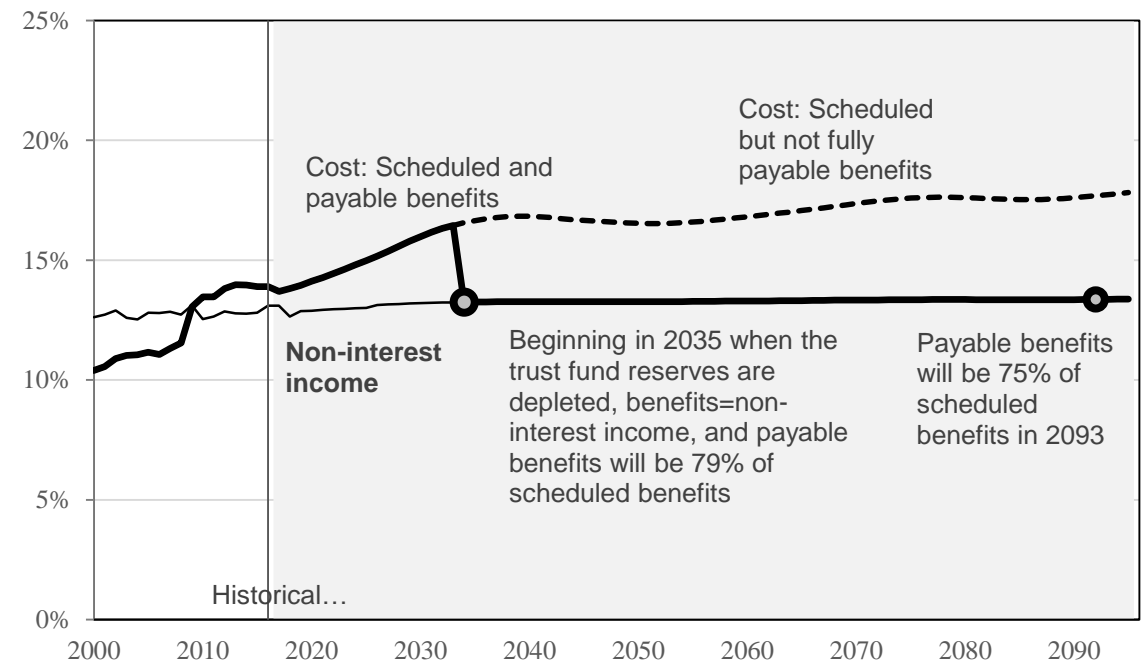
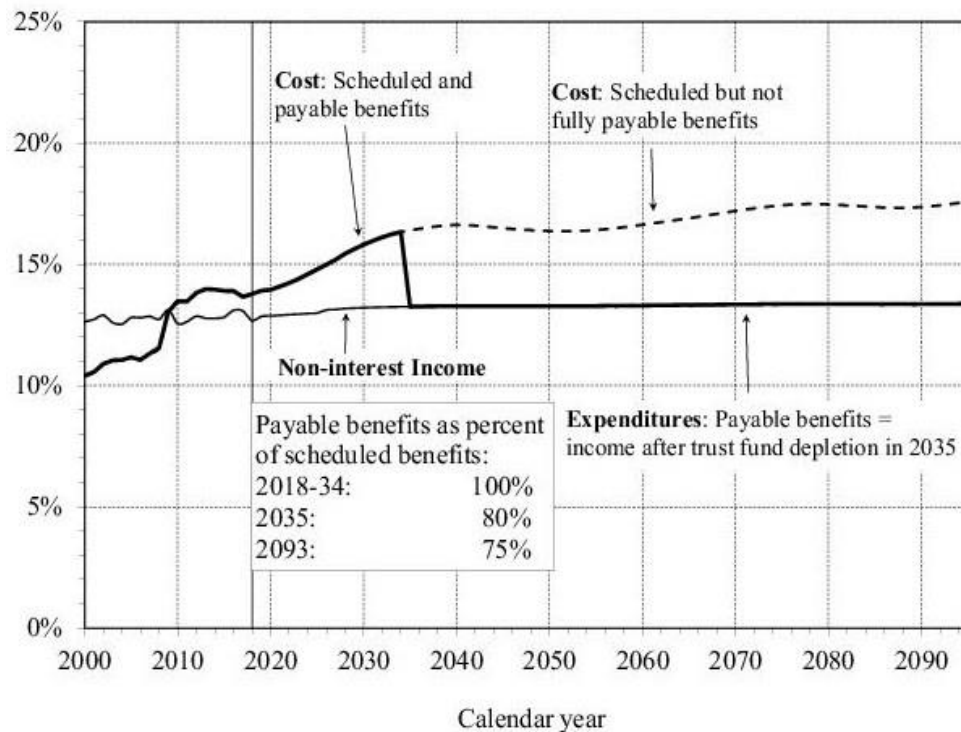
Turn tables into graphs

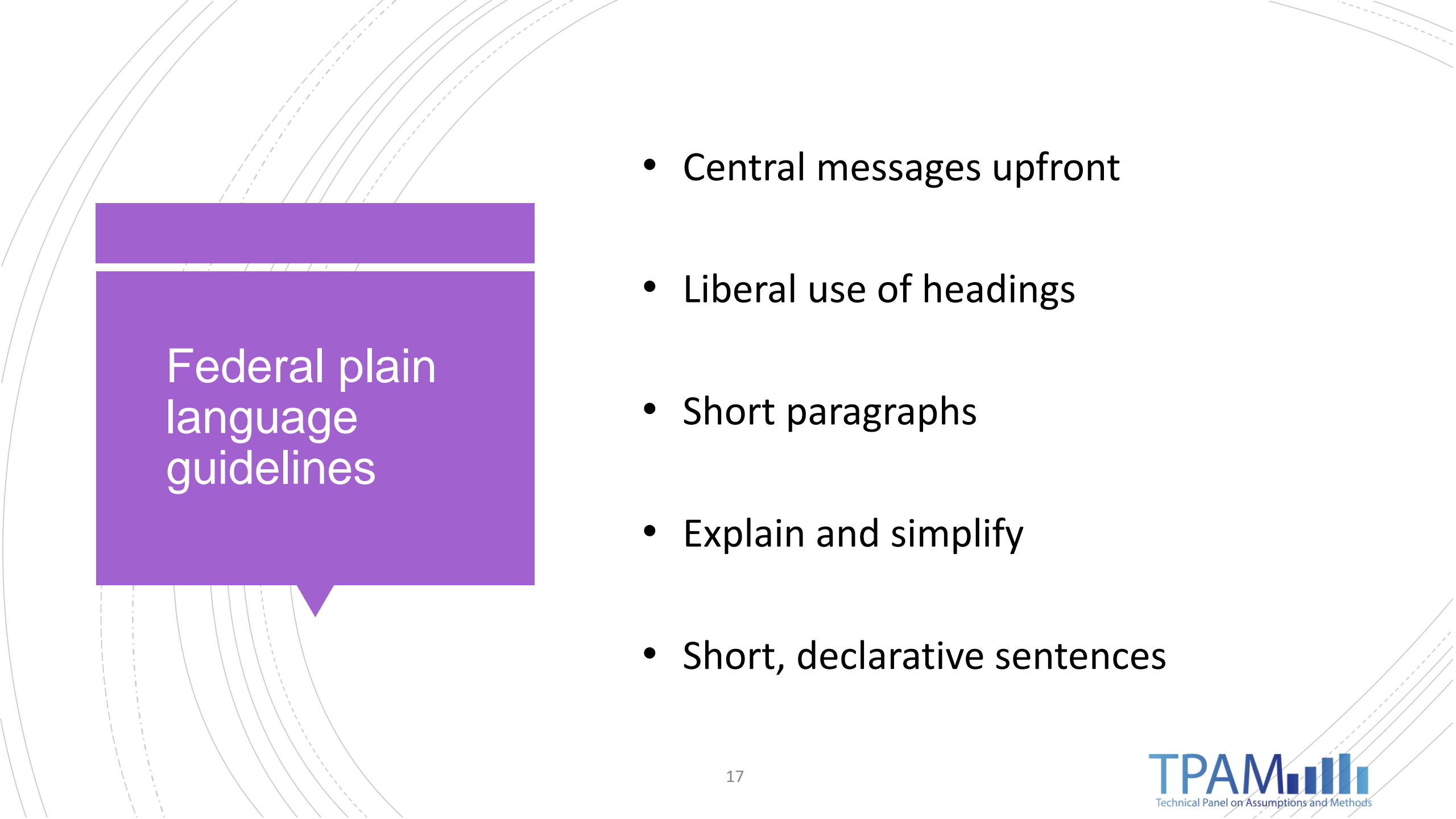
Calendar year	Total fertility rate ^b	Age-sex-adjusted death rate ^c per 100,000		
		Total	Under 65	65 and over
Historical data:				
1940	2.23	1,919.8	750.1	9,718.8
1945	2.42	1,716.6	674.8	8,662.9
1950	3.03	1,561.9	570.2	8,173.7
1955	3.50	1,453.8	508.2	7,758.4
1960	3.61	1,454.3	503.2	7,795.4
1965	2.88	1,428.8	495.2	7,653.3
1970	2.43	1,340.0	485.7	7,036.3
1975	1.77	1,204.8	426.6	6,393.6
1980	1.82	1,136.9	384.3	6,154.3
1985	1.83	1,081.0	353.3	5,932.9
1990	2.07	1,022.9	333.6	5,618.9
1995	1.98	1,002.7	317.9	5,568.6
2000	2.05	961.5	281.0	5,498.9
2005	2.06	901.9	270.7	5,110.3
2010	1.93	820.8	248.5	4,636.1
2011	1.89	820.7	249.1	4,631.3
2012	1.87	811.7	248.6	4,565.6
2013	1.85	812.2	249.4	4,564.6
2014	1.86	804.9	251.4	4,495.1
2015	1.84	815.0	254.9	4,549.7
2016	1.82	d 808.2	260.5	d 4,460.0
2017	1.76	d 802.7	d 250.6	d 4,483.6
2018	e 1.74	e 791.8	e 249.3	e 4,408.3
Intermediate:				
2020	1.76	779.9	245.9	4,339.7
2025	1.98	748.2	234.8	4,170.8
2030	2.00	716.5	222.6	4,009.3
2035	2.00	686.2	210.6	3,857.2
2040	2.00	657.7	199.3	3,714.4
2045	2.00	631.0	188.6	3,580.6
2050	2.00	606.0	178.7	3,455.2
2055	2.00	582.6	169.4	3,337.4
2060	2.00	560.6	160.7	3,226.7
2065	2.00	540.0	152.6	3,122.5
2070	2.00	520.6	145.0	3,024.3
2075	2.00	502.3	137.9	2,931.6
2080	2.00	485.1	131.3	2,844.0
2085	2.00	468.8	125.0	2,761.1
2090	2.00	453.5	119.1	2,682.6
2095	2.00	438.9	113.6	2,608.1



Focus graphs on core messages

Figure II.D2.—OASDI Income, Cost, and Expenditures as Percentages of Taxable Payroll
[Under Intermediate Assumptions]





Federal plain language guidelines

- Central messages upfront
- Liberal use of headings
- Short paragraphs
- Explain and simplify
- Short, declarative sentences

Simplify public
facing material

- Bullet points, **bolding**, underlining, *italicizing*
- Table of changes to key outcomes
- Short summaries
- Key figures up front

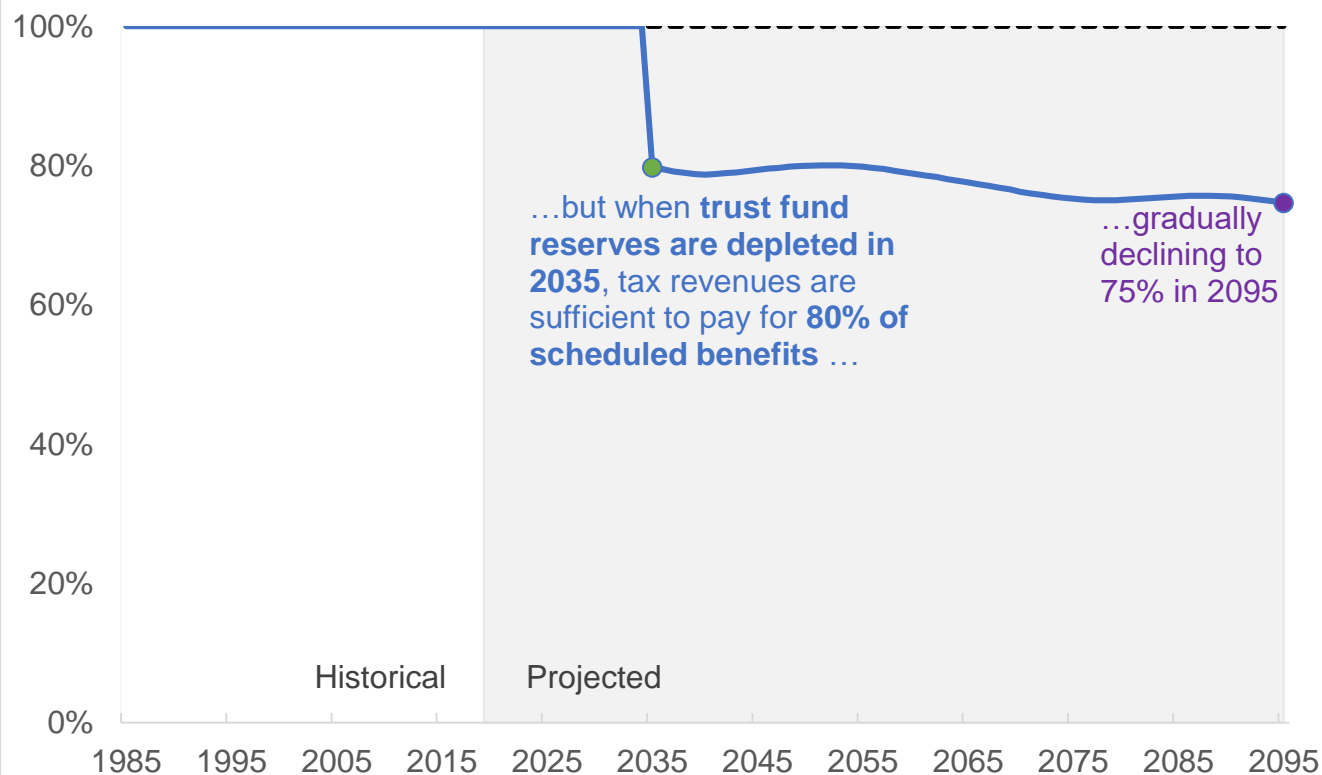
Trust fund
reserve
depletion
date

- Provide clear context
- Rename!
 - “partial benefits date”
 - “reduced benefits date”
- Add a new, simpler graphic

A new, simpler
graphic

Social Security has sufficient resources to fund 100% of scheduled benefits through 2034...

Percent of scheduled benefits



Enhance online and media strategies

Expert advice to help with enhancements:

- Improve website user interface
- Create FAQs
- Leveraging social media
- Improve OCACT's webpage on the TR

Transparency

- Expand sensitivity analyses
- Greater external access to projection models
- Make available comparisons of past projections to actual realizations

Demographic Assumptions

Summary: Demographic Recommendations

Lower fertility rates and continued postponement of births to older ages

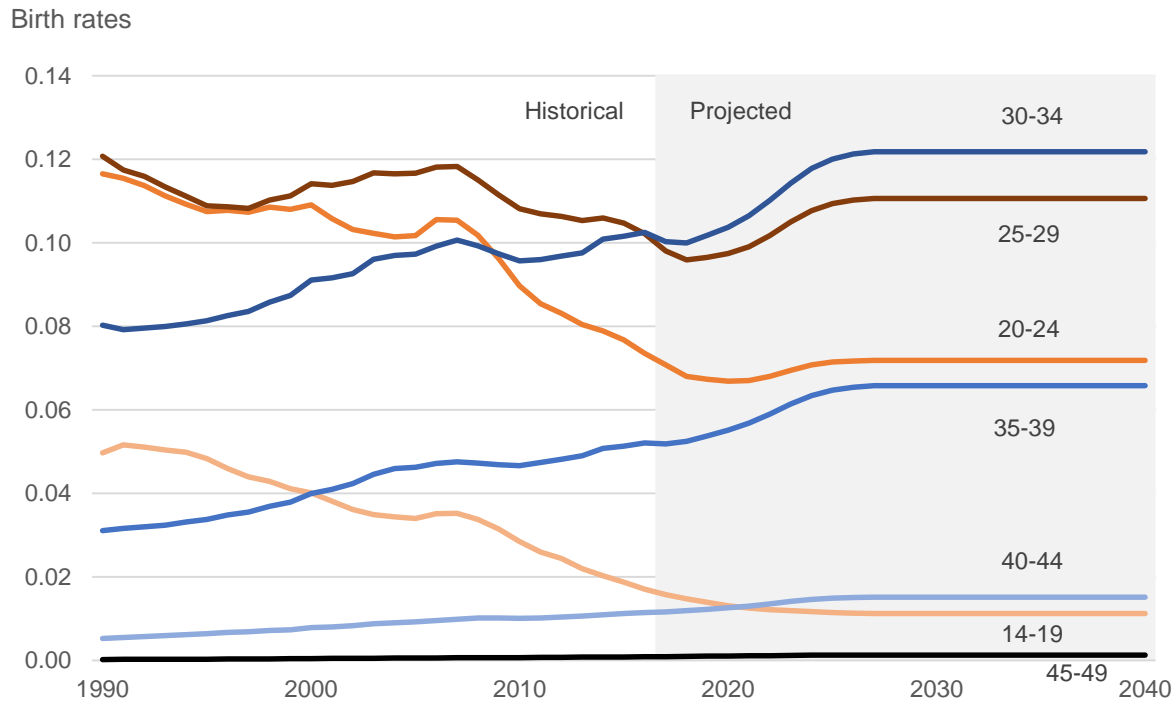
Faster ultimate rate of mortality improvement in line with historical trends

Project long-range immigration as share of the population

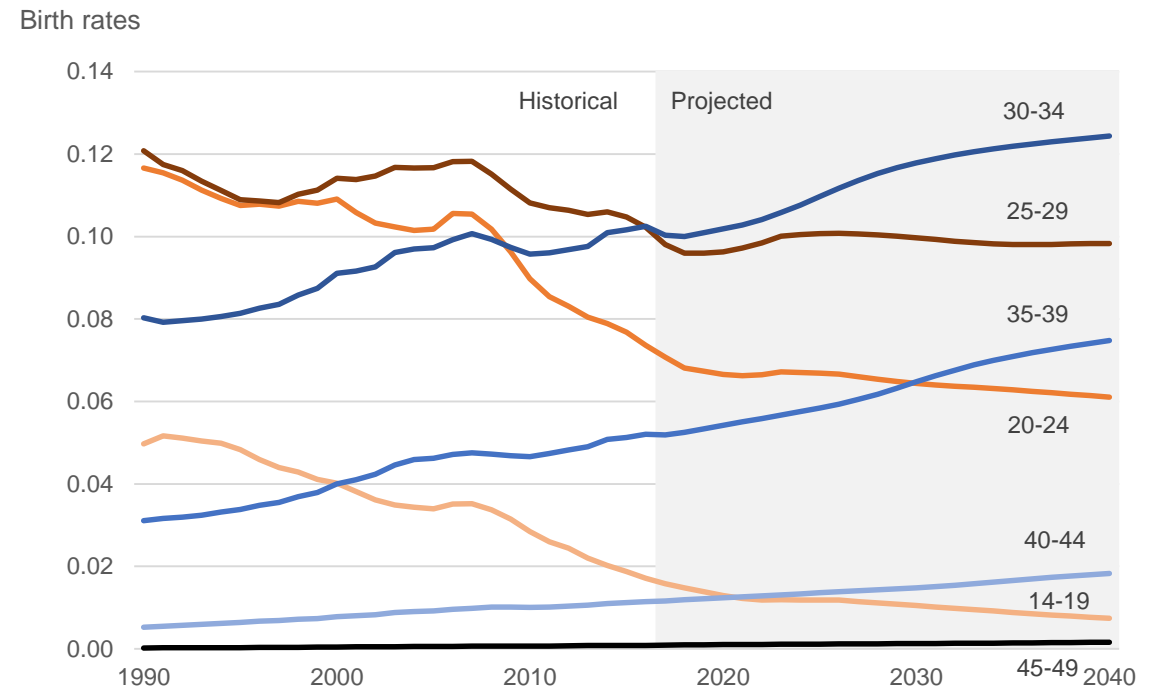
Emphasize uncertainty

Fertility: Panel expects shift toward later childbearing to continue for decades

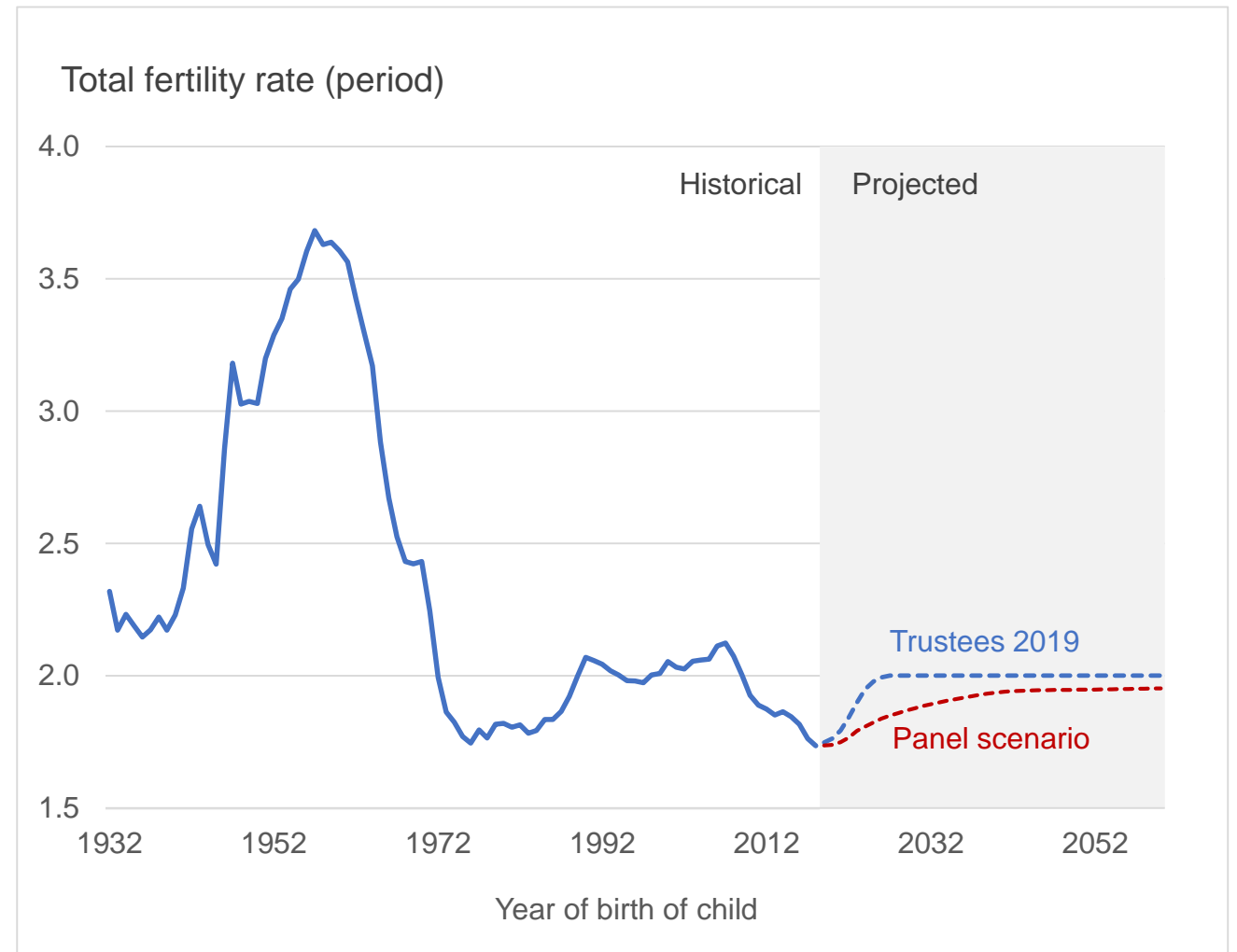
Trustees assumed birth rates, by age



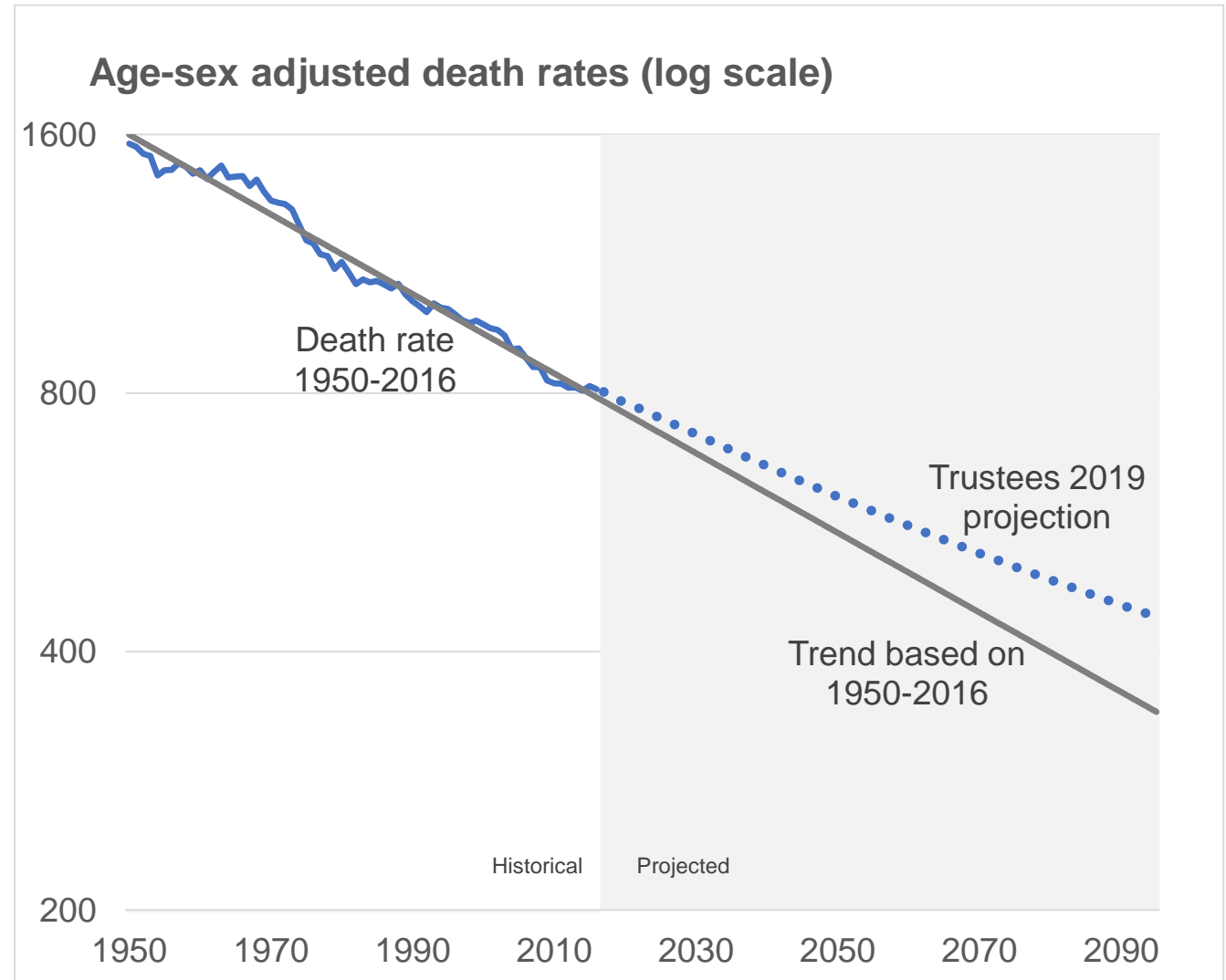
Technical Panel scenario birth rates, by age



So fertility rates will rebound more slowly



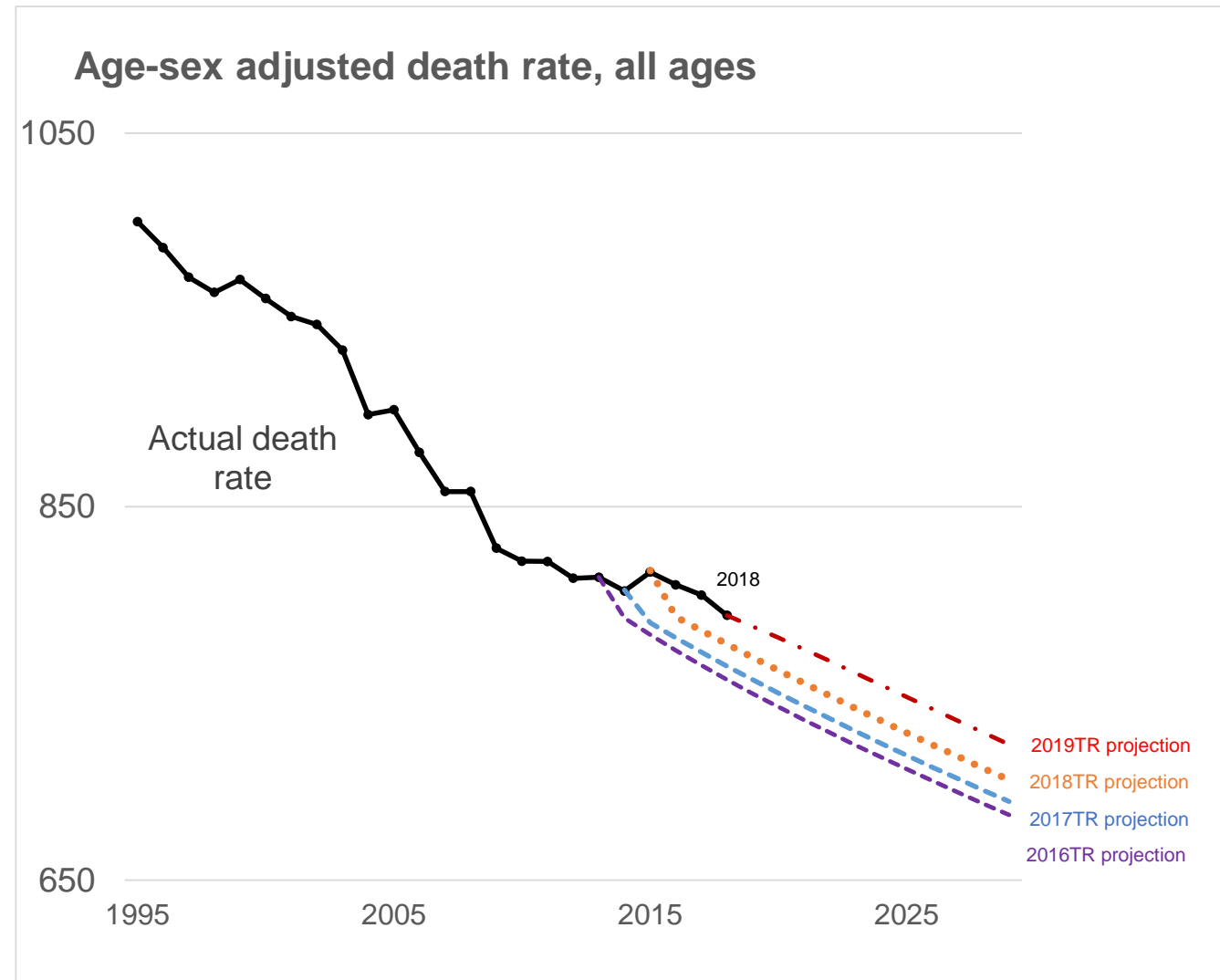
Mortality: Panel recommends increasing the ultimate rate of mortality improvement to align with long-term historical experience



Near-term
mortality
improvement hard
to predict

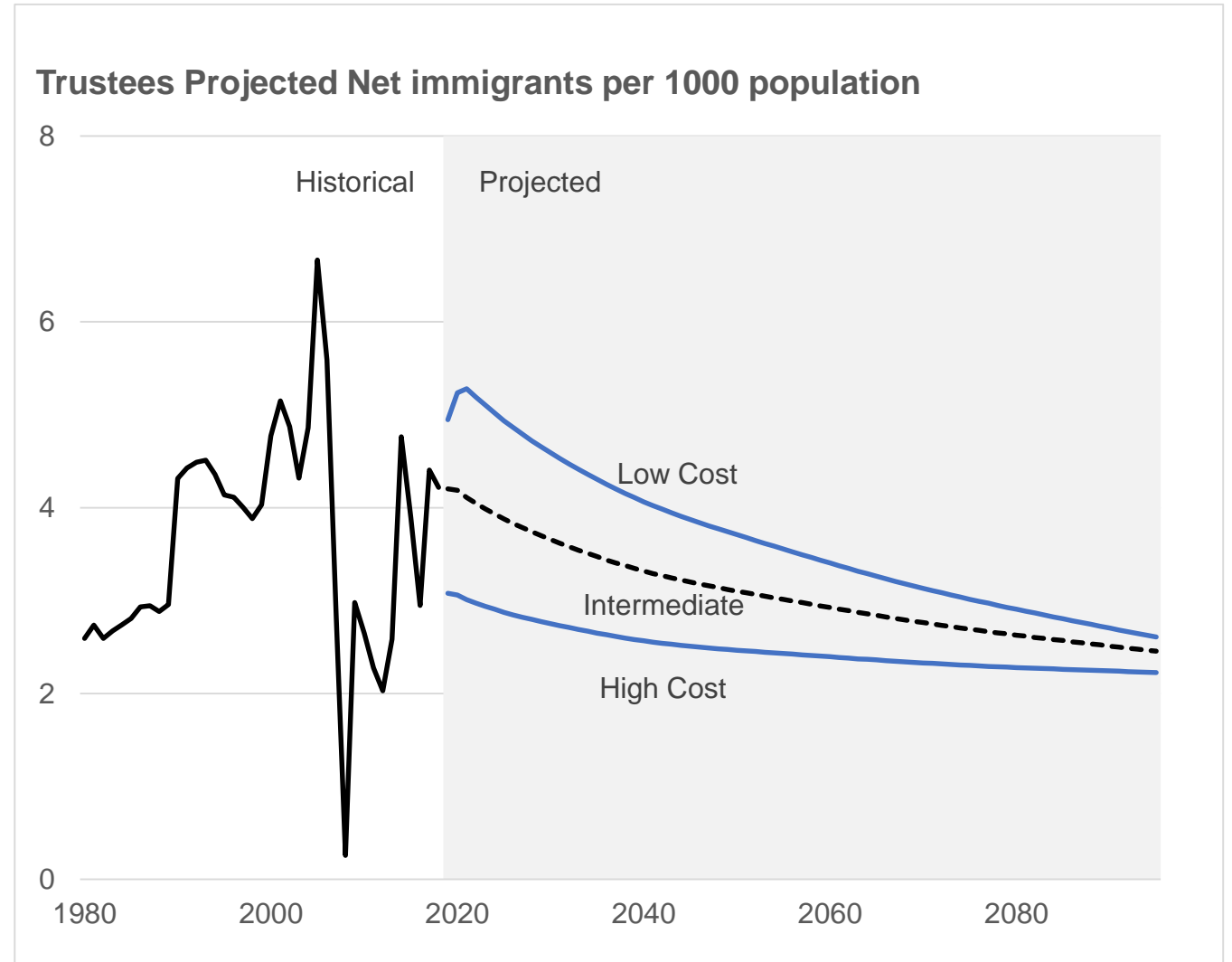
Poor recent experience
due to social causes
such as opioids and
deaths of despair

How long will it last?



Net immigration should be tied to the size of the population

Trustees project net immigration as a declining share of population



Projections should better reflect additional characteristics of population

Develop the capability to model native and immigrant fertility separately

Develop capability to model demographic assumptions by income and/or education

Factor in cause of death analysis in the mortality assumptions

Capture the changing characteristics of immigrants, e.g. country of origin

Economic Assumptions

Productivity Growth

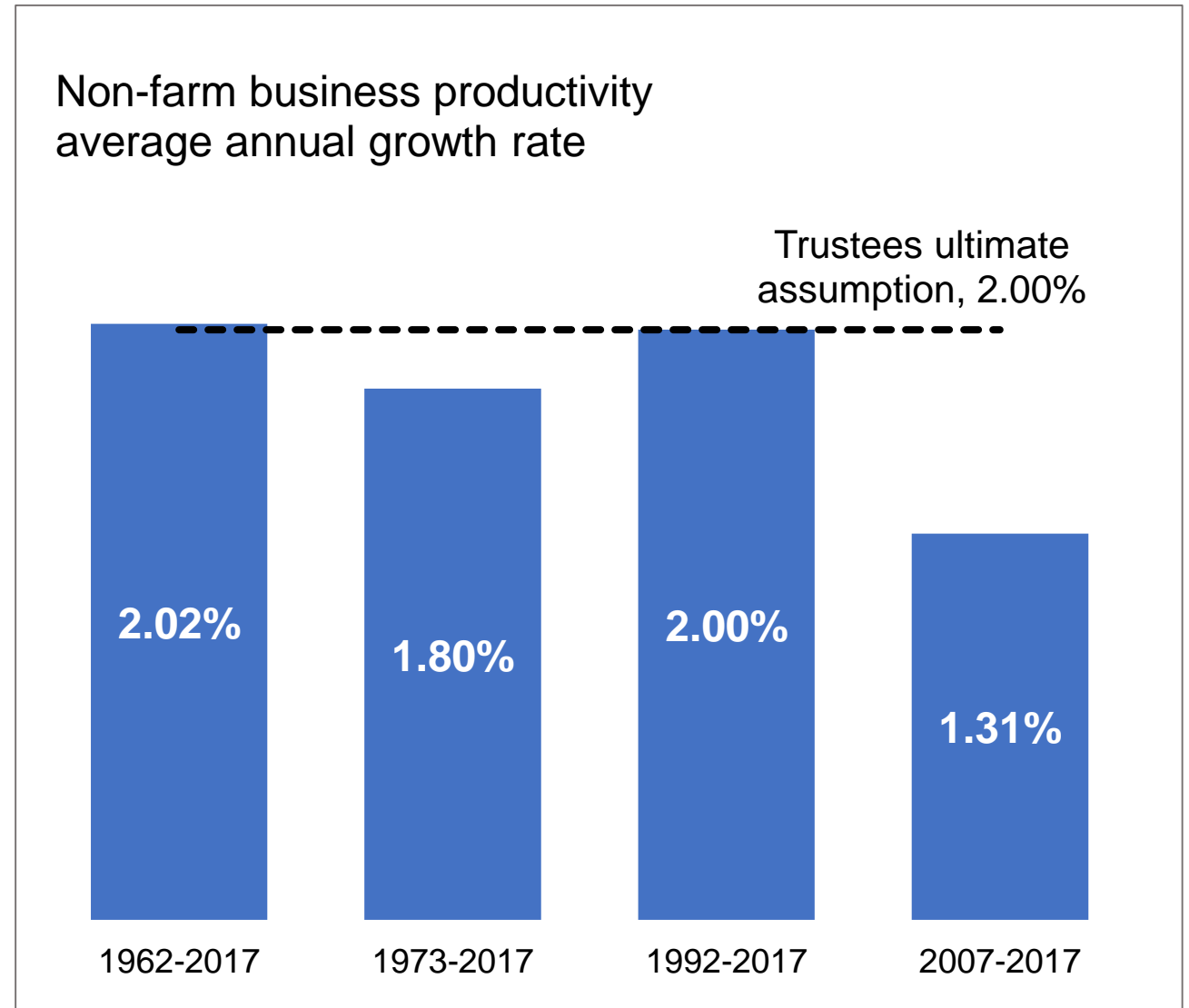
Put some weight on possibility it remains low

Affected by structural changes in economy: aging, less dynamism and competition

Other forecasters have NFB productivity growth over next 30 years well below 2%

Trustees assumption that it rises to 2% possible, but not balanced

Panel suggests 1.9%



Labor Share

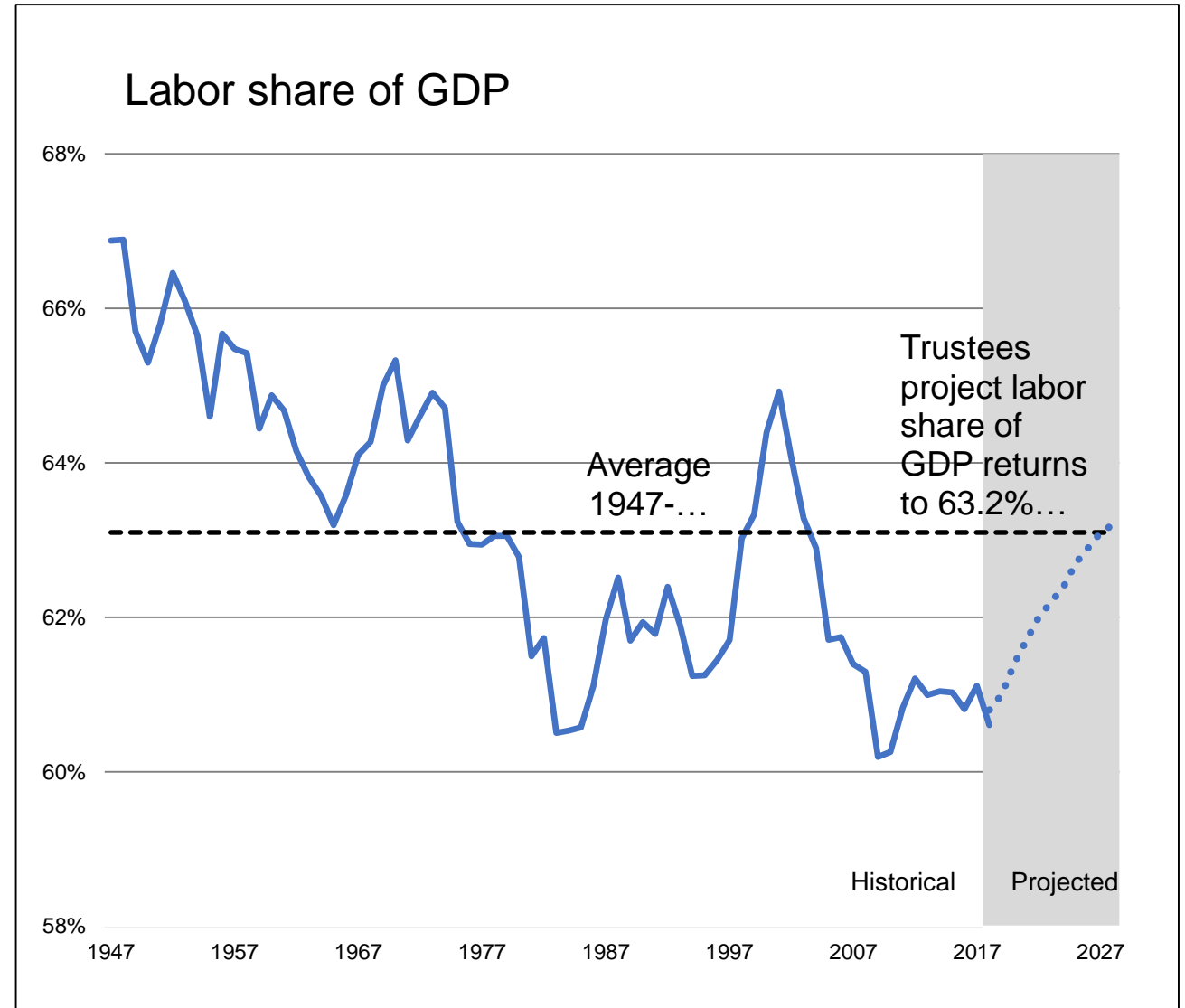
Don't assume rebounds to long-term average

Share declined through early 1980s; well below 1947-2018 average since then

Structural changes (e.g. higher depreciation) lowered share

Changes likely long-lasting

Panel doesn't anticipate rebound in labor share



Earnings Share of Compensation

Rate of growth of health spending has slowed markedly

Panel suggest excess growth of 1 ppt in near term, declining over time. term, and decline over time

Not much different from Trustees, but Trustees projection is contingent on Cadillac ta.

We don't think excess cost growth assumption should be increased if Cadillac tax repealed

Historical interval	Difference between growth rates in employer-paid health insurance and total compensation
1975-2017	2.37%
1975-1992	4.76%
1992-2017	0.74%
1992-2007	0.81%
1982-2017	1.40%
1982-2007	1.60%
2007-2017	0.64%

Taxable Share of Earnings

Looks like share fell through 2000 but then flattened

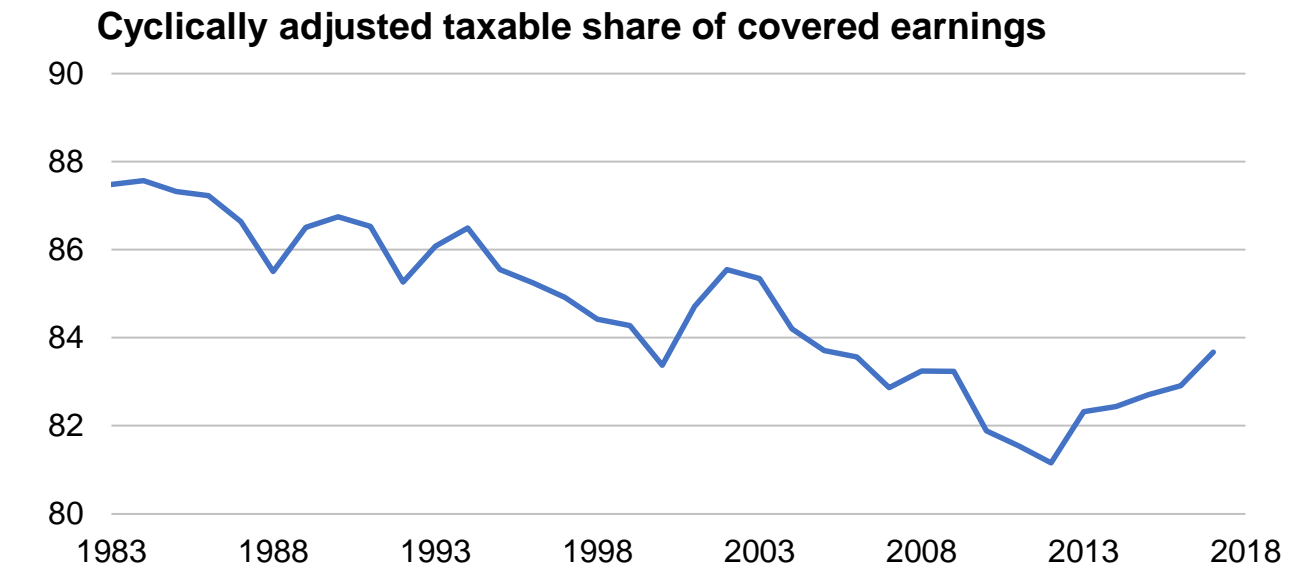
But share taxable rises with unemployment rate, making hard to eyeball

Adjusting for cyclical shows steady decreases through 2013, but then unexplained rise

We think too few years to declare decline over

Structural factors that have increased inequality likely continuing

Panel recommends assuming trend abates gradually over 25 years



Labor Force Participation (LFP)

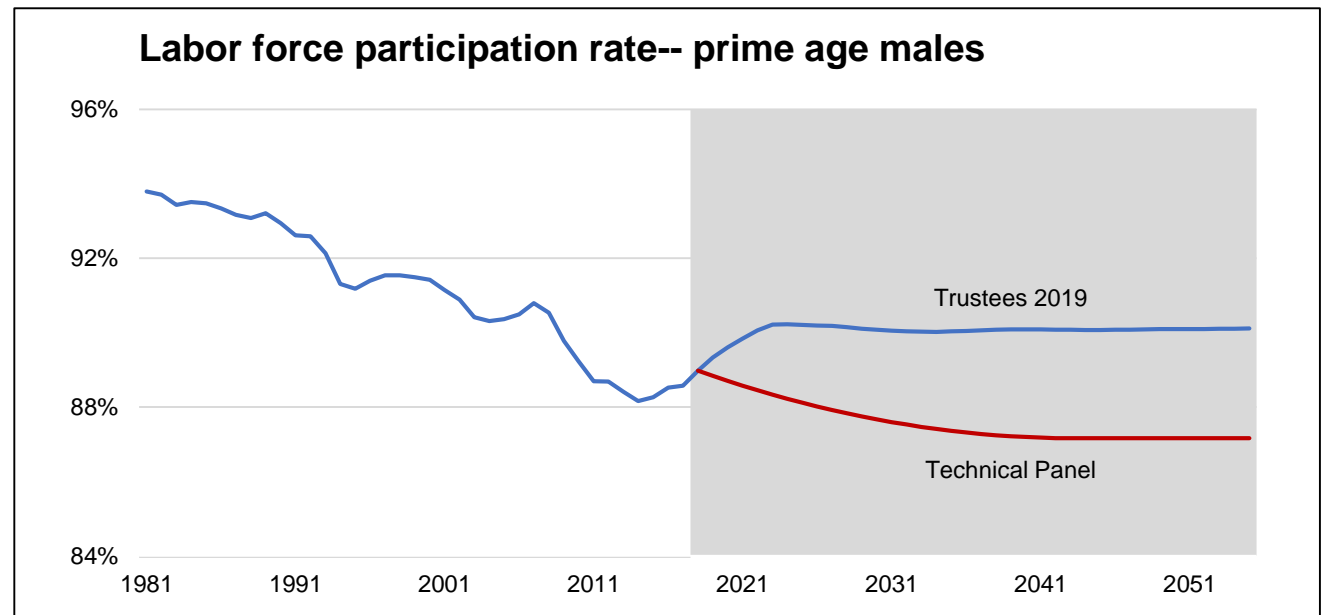
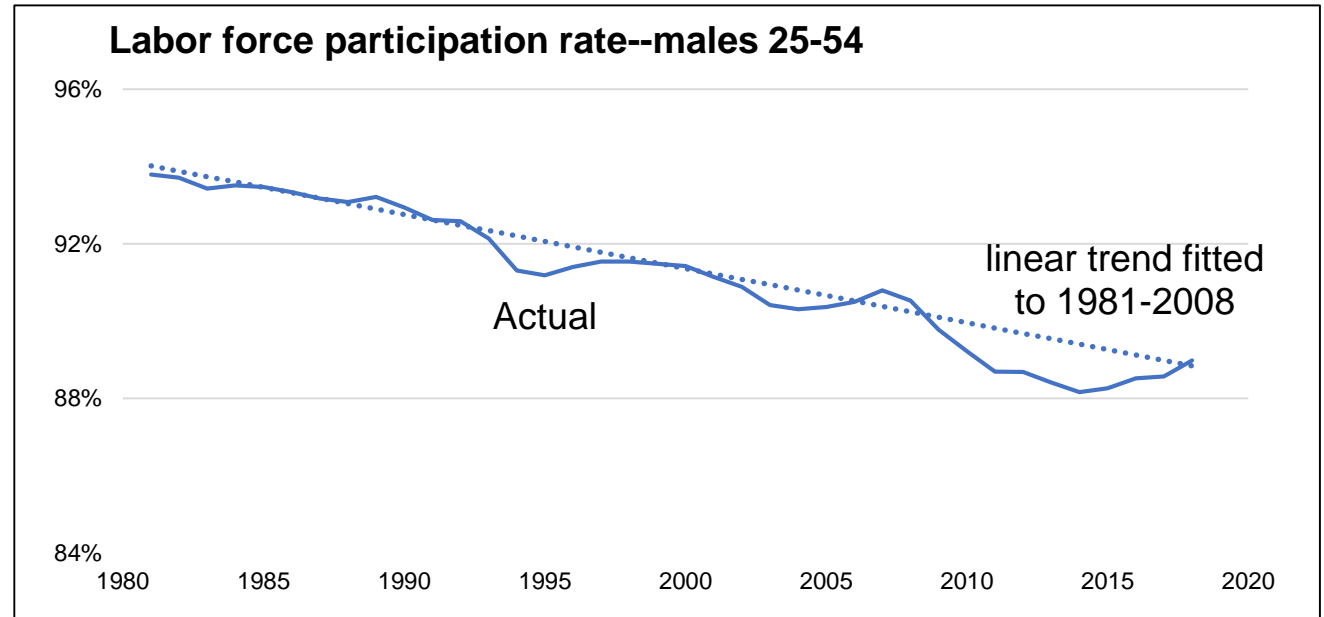
Long-run decline in prime-age male LFP.

- Fell faster during recession, then recovered
- Now similar to pre-2008 trend

Trustees: turnaround continues

Panel: drivers of decline: globalization, technology haven't ended.

- Long-run decline continues, but abates over 25 years
- Similar story for 16-24 men and women (not shown)



Program-Specific

Benefit models and alternatives

Benefit model projects number of future beneficiaries and average benefit amounts

OCACT adjusts historical data to reflect projected changes in working and claiming behavior

Direction of adjustments sensible but ad hoc approach makes it hard to impose (or verify) internal consistency across assumptions

Microsimulation would ensure internal consistency of assumptions

Panel recommends comparing benefit projections based on current methodology against results from alternate models such as a microsimulation model

Benefit claiming analysis

Benefit claiming patterns tied to historical claiming patterns, adjusted for:

- increases in full retirement age
- changes in labor force participation

Claiming patterns may change in future:

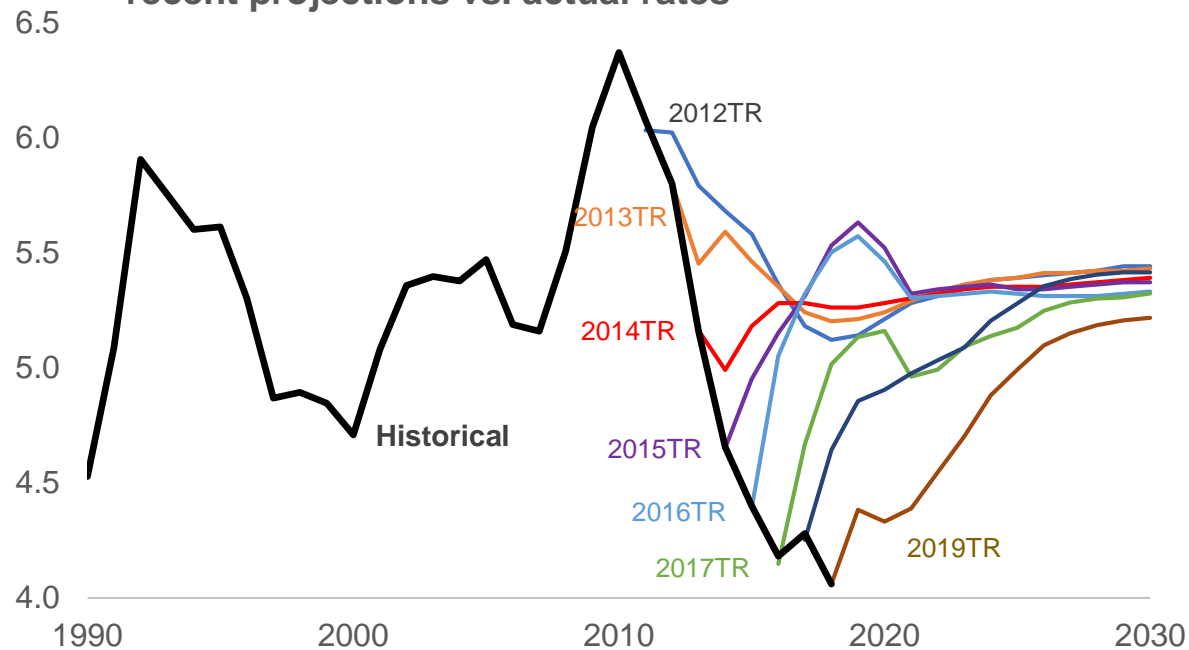
Gains from delaying benefits have increased in past two decades

People may accelerate claims in anticipation of trust fund depletion

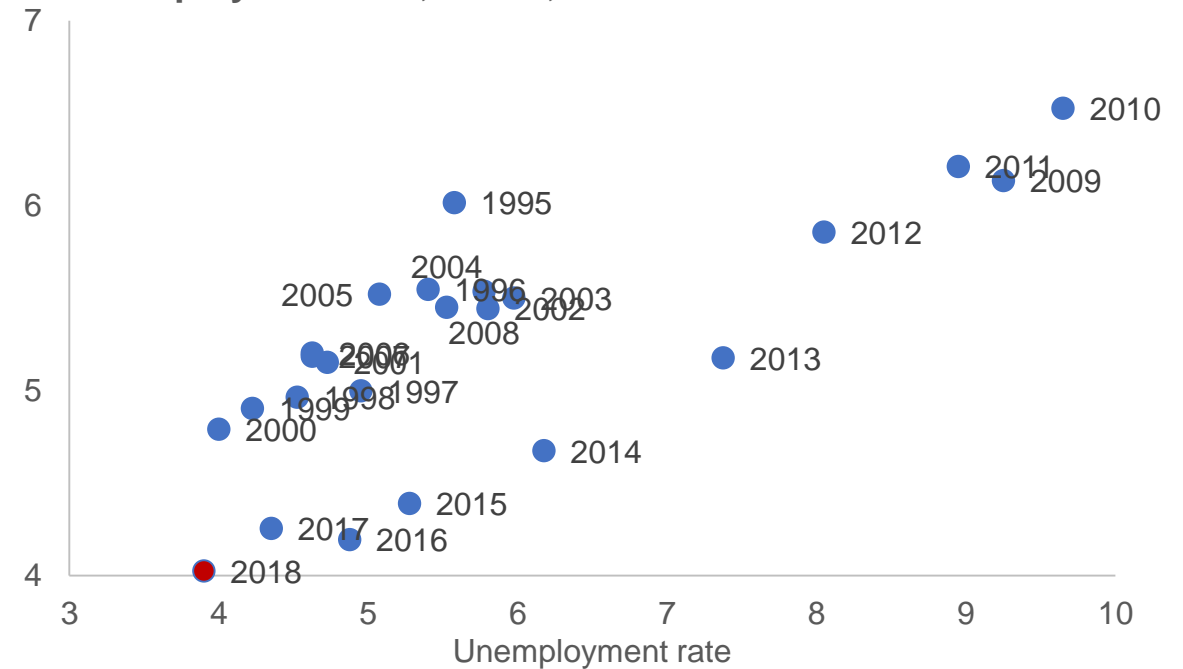
Panel recommends SSA study sensitivity of key financial outcomes (cost, income, depletion date) to benefit claiming age patterns

Disability incidence trends

Disability incidence rate, age-sex adjusted,
recent projections vs. actual rates



Disability incidence rate age-adjusted vs.
unemployment rate, males, 1995-2018



Lower disability incidence rate

Unclear why there was a post-2008 shift, or whether shift is temporary or permanent

Appears to be driven by award rate, rather than application rate

However, private disability incidence has also fallen (suggesting workplace factors)

Signs of reversal among younger age groups

Panel recommends lowering ultimate age-sex adjusted disability incidence rate to 4.9

Puts a bit of weight on recent observed downward shift in disability incidence (which we view as mostly temporary) and consistent with unemployment rate recommendation

Recap

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Recommendations - Position Trustees Report for the future

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